ABSTRACT

The present invention relates to a method of generating at least one polydentate metal chelating affinity ligand, which method comprises the steps of

a) providing at least one cyclic scaffold comprising a carbonyl, an adjacent sulphur and a nucleophile;

b) providing at least one polydentate metal chelating affinity ligand arm, optionally in a form wherein the metal chelating functionalities are protected, on each scaffold by derivatisation of the nucleophile of said scaffolds, while retaining the cyclic structure of the scaffold;

(c) ring-opening at the bond between the carbonyl and the sulphur of the derivatised scaffold by adding a reagent that adds one or more metal chelating affinity ligand arms to the scaffold; and, if required,

(d) deprotecting the functionalities of the ligand arm(s) provided in step (b).

In the most preferred embodiment of the method, steps (c) and (d) are performed simultaneously as one single step.